NOVA SCOTIA
Environment and Labour

1-877 9ENVIRO
www.gov.ns.ca/enla/water/

Radionuclides in Well Water: Frequently Asked Questions

WHAT ARE NATURAL RADIONUCLIDES?

- Natural radionuclides are radioactive elements found everywhere in our environment including the soil, water and even each other. Examples of naturally occurring radionuclides commonly found in certain bedrock in Nova Scotia are uranium and Lead-210.

WHAT IS RADIOACTIVITY?

- Radioactivity is radiation given off by various materials (radionuclides) as their atoms break down. Radioactivity is measured in bequerels, which represents one radioactive atom disintegrating per second.

HOW DO RADIONUCLIDES GET INTO DRINKING WATER?

- It is natural to find radionuclides in drinking water. They can get into water as it comes in contact with natural radioactive materials in the soil.

WHAT TYPE OF DRINKING WATER SUPPLIES ARE MORE LIKELY TO HAVE RADIONUCLIDES?

- Drinking water supplied from drilled wells is more likely to have radionuclides than surface water or dug well supplies.

HOW CAN I HAVE MY WELL TESTED FOR RADIONUCLIDES AND WHAT SHOULD I TEST FOR?

- You should test for Total Uranium and Lead-210.
- The testing method for Lead-210 was changed in 2004. Please refer to the document entitled *Testing your well water for Lead-210* on our web site.
- For information on water testing for radionuclides contact Nova Scotia Environment and Labour at **1-877-9ENVIRO** (1-877-936-8476) Or visit our web site. www.gov.ns.ca/enla/water/

WHAT WILL IT COST ME TO HAVE THESE TESTS DONE?

- The total cost to have your water tested for Total Uranium and Lead-210 is approximately $100.

CAN I DRINK THE WATER WHILE I'M WAITING FOR THE RESULTS?

- You can continue to drink and wash with the water while waiting for the results of this test. However, if you feel uncomfortable about doing so, you can use bottled water from a supplier who is a member of the Canadian Bottled Water Association (CBWA) or the International Bottled Water Association (IBWA).

WHAT HAPPENS IF THE LEVELS FOR TOTAL URANIUM AND LEAD-210 ARE DETECTED?

- If the levels are above the guidelines for any or all of these natural radionuclides, your water should be retested and if it is sill above the guidelines you should take corrective action. For more information please refer to the document entitled *Flow Chart for Testing Well Water for Radionuclides in Nova Scotia* on our web site.

IS THERE A NECESSITY TO DO ANY MORE TESTING OF MY DRINKING WATER?

- Yes, if you have switched to a new well and are concerned about radionuclides you should have the water tested for Total Uranium and Lead-210. If you've installed a treatment system you should have the water tested at least once to ensure the treatment system is functioning properly.

WHAT ARE THE RISKS FROM DRINKING WATER WITH INCREASED LEVELS OF NATURAL RADIONUCLIDES?

- According to health officials with the Department of Health, the risks from exposure to natural radiation, including radionuclides in drinking water, is extremely small. The additional radiation exposure from drinking water with levels of radionuclides above Health Canada's Guidelines for Canadian Drinking Water Quality is very, very small and any additional health risk from drinking this water is extremely small.

SHOULD I HAVE A MEDICAL CHECK-UP IF I'VE BEEN DRINKING THIS WATER FOR A LONG TIME?

- There is no need to see a doctor just because you have been drinking this water. However, if you are unwell or have concerns about you health, then you should see your doctor.

ARE MY CHILDREN AT INCREASED RISK?

- Children are at no greater risk to their health than adults. For both groups the health risks are extremely small.

HOW CAN I GET MORE INFORMATION ON RADIONUCLIDE TESTING AND TREATMENT SYSTEMS?

- You can obtain information on radionuclide testing from Nova Scotia Environment and Labour by calling **1-877 9ENVIRO** (1-877-936-8476), or visit our web site, www.gov.ns.ca/enla/water/